AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present appl[illegible]ation, irrespective of whether the claim(s) remains under examination in the application are pr[illegible]ented below. The claims are presented in ascending order and each includes one status ide[illegible]tifier. Those claims not cancelled or withdrawn but amended by the current amendment utili[illegible]e the following notations for amendment: 1. deleted matter is shown by strikethrough for six c[illegible] more characters and double brackets for five or less characters; and 2. added matter is sho[illegible]n by underlining.

1. (Cancelled) A method for distributing incoming client requests across multiple serv[illegible]rs in a networked client-server computer environment, said method comprising the steps of:

(a) collecting at least two client requests incoming within a predetermin[illegible]d time interval;

(b) analyzing each said collected client requests with respect to at least o[illegible]ne attribute;

(c) collecting resource capability information of each server;

(d) upon completion of said time interval, distributing said collected cli[illegible]nt requests across the multiple servers in response to in response to the attributes of sa[illegible]d collected client requests and the resource capability information of the multiple ser[illegible]rs; and

(e) repeating steps (a) through (d) for subsequent ones of said time inter[illegible]al.

2. (Cancelled) The method of Claim 1, wherein the attributes analyzed in step (b) are selected from the set comprising: categorical criteria and demographic criteria

3. (Amended) The method of Claim [[1]]23, wherein said resource capability informa[illegible]on comprises a resource capability metric for each of at least five resource parameters for each

server, regarding the server's CPU availability, memory availability, connectivity to storag., connectivity to a proxy server, and connectivity to peer servers.

4. (Amended) The method of Claim 3, wherein said method ~~wherein step (a)~~ further comprises the step of providing a dynamic, relational database and process of statistical inference for ascertaining expected demand patterns involving said at least one attribute.

5. (Original) The method of Claim 4, wherein the number of said expected demand patterns can dynamically increase or decrease.

6. (Original) The method of Claim 4, wherein a resource requirement metric for each of said at least five resource parameters is assigned to each said expected demand pattern, wherein each said collected request is identified with at least one said expected demand pattern, and wherein said resource requirement metrics assigned to said identifying expected demand pattern are further assigned to said collected request.

7. (Amended) The method of Claim 6, ~~wherein the step (d)~~ further ~~comprises~~ comprising the steps of determining the metric distance between said resource requirement metrics and said resource capability metrics for at least one combination of said collected client request and server pairings and selecting a server for each said collected request so that the sum of said metric distances for said at least one combination of said pairings is minimized.

8. (Amended) The method of Claim 7, wherein an optimization paradigm is used to at least partially perform ~~step (d)~~ the step of selecting a server for each said collected request so that the sum of said metric distances for said at least one combination of said pairings is minimized.

9. (Canceled) A method for distributing incoming client requests across multiple servers in a networked client-server computer environment, said method comprising the steps of:

(a) collecting at least two requests incoming within a predetermined time interval;

(b) analyzing each of said collected request with respect to at least one attribute;

(c) analyzing said at least one attribute for ascertaining statistical patter. s across said collected requests;

(d) identifying at least one resource parameter for said servers.

(e) collecting a resource capability metric of each server for said at leas. one resource parameter;

(f) assigning a resource need metric for said at least one resource parar eter to each statistical pattern;

(g) correlating each of said collected requests with at least one said stati· ical pattern;

(h) assigning said metric for said at least one resource parameter assign·l to said statistical pattern correlated to said collected request;

(i) determining a metric distance between a resource need metric and a resource capability metric for at least one combination of a pairing of said collectec request and one of said servers;

(j) upon completion of said time interval, selecting a server for each of : aid collected request so that a sum of said metric distances for said pairings is minimiz: t; and

(k) repeating steps (a) through (j) for consecutive ones of said time inte· als.

10. (Canceled) The method of Claim 9, wherein the attributes analyzed in step (b) are selected from the set comprising: categorical criteria and demographic criteria.

11. (Canceled) The method of Claim 9, wherein said at least one resource capability m· ric comprises metrics chosen from the set comprising: the server's CPU availability, memory availability, connectivity to storage, connectivity to a proxy server, connectivity to peer se· ers, and connectivity to the Internet.

12. (Canceled) The method of Claim 11, wherein step (g) said method further comprises the step of providing a dynamic, relational database and process of statistical inference for ascertaining said statistical patterns.

13. (Canceled) The method of Claim 9, wherein the number of said statistical patterns can dynamically increase or decrease.

14. (Canceled) The method of Claim 9, wherein an optimization paradigm is used to select a server.

15. (Canceled) A system for distributing incoming client requests across multiple servers in a networked client-server computer environment, said system comprising;

a request table to collect at least two requests incoming within a predetermined time interval;

a request examiner routine to analyze each said collected request with respect to at least one attribute;

a system status monitor to collect resource capability information of each server; and

an optimization and allocation process to distribute said collected requests in said table across the multiple servers upon completion of said time interval in response to said request table and said resource capability information.

16. (Canceled) The system of Claim 15, wherein there are at least two said time intervals and said time intervals are consecutive.

17. (Canceled) The system of Claim 15, wherein the table is maintained as a relational database and further comprising process of statistical inference to ascertain expected demand patterns involving said at least one attribute.

18. (Amended) The system of Claim [[15]] 24, wherein said resource capability inform..tion comprises a resource capability metric for each of at least a plurality of resource parameter:: for each server selected from the set comprising: the server's CPU availability, memory availa' ility, connectivity to storage, connectivity to a proxy server, connectivity to peer servers, and connectivity to the Internet.

19. (Amended) The system of Claim [[15]] 24, wherein the relational database is dynar ic and wherein the number of said expected demand patterns can dynamically increase or dec ease.

20. (Amended) The system of Claim [[15]] 24, wherein a resource requirement metric f or each of said at least five resource parameters is assigned to each of said expected demand pattern, wherein each said collected request is correlated with at least one said expected de mand pattern, and wherein said resource requirement metrics assigned to said correlated expecte i demand pattern are further assigned to said collected request.

21. (Original) The system of Claim 20, wherein the process of distributing said collecte l requests further comprises determining the metric distance between said resource requirem nt metrics and said resource capability metrics for at least one combination of a pairing of sai: collected request and server and selecting a server for each said collected requests so that t e sum of said metric distances for said at least one combination of said pairings is minimize l

22. (Original) The system of Claim 21, wherein a global optimization paradigm is u ed to minimize a total assignment cost for said pairings of all of said servers and said requests.

23. (Newly Presented) A method for distributing incoming client requests across multiple servers in a networked client-server computer environment comprising:

(a) collecting client requests incoming within a predetermined time interval;

(b) upon receipt of the at least two incoming client requests within the predetermin 1 time interval, analyzing each of the client requests using categorical criteria and demographic criteria to extract attributes of the request;

(c) classifying the client requests based on the extracted attributes by comparing eac request with a pattern selected from a set of patterns in an adaptive request table to nd a match-pattern that best matches the request;

(d) using the match-pattern to associate a requirements vector with each request, th requirements vector being populated with at least five resource parameters that pres ibe the expected resource requirements of the request;

(e) capturing resource capability information for each server at least once during the predetermined time interval, each server being associated with a capability vector refreshed with the resource capability information;

(f) following steps (d) and (e), for each client request and server pair, computing a v ctor space distance between the requirement vectors and capability vectors correspondin to the client request and the server respectively, the vector space distance being an upd te to an element in a cost matrix initialized at the start of the predetermined time interval

(g) at the completion of the time interval, distributing the client requests across mult ple servers to minimize a cost metric associated with the cost matrix for all combinatio of client requests and server resource capabilities; and

(h) repeating steps (a) through (g) for subsequent ones of said time interva after initializing the cost matrix.

24. (Newly Presented) A system for servicing multiple requests to be distributed across m: tiple servers in a networked client-server computer environment, the system comprising:

a request examiner routine for analyzing each of the client requests using categorical criteria and demographic criteria to extract attributes of the request;

a request table for collecting attribute information associated with each clier . request incoming within the predetermined time interval;

an adaptive request table populated with a set of patterns, each pattern assoc.ated with a generic request type that is most likely to be received by a proxy server, the adaptive request table suited for classifying client requests by comparing each requ: st with a pattern selected from the set of patterns in the adaptive request table to find :n expected demand pattern that best matches the client request resulting in a successf..l match, so that an expected demand on resources by the client request can be predic:.d using the expected demand pattern in the adaptive request table;

a relational database coupled with a process of statistical inference to facilit: e the construction of an adaptive request table, the adaptive request table being updated b: the process of statistical inference for each successful match of the client request with the expected demand pattern from the set of patterns;

a resource table for collecting resource capability information about each se:.er at least once during the predetermined time interval; and

an optimization and allocation process for selecting a server resource for rec.iving each client request so that a sum of all costs in a cost matrix is minimized for all combinations of client requests and server resources.